

AMENDMENT TO THE SPECIFICATION

1. Please replace lines 25- 27, at page 10, with the following text:

CLEAN VERSION:

Figures 3A, 3B, and 3C are diagrams showing a database for storing genetic variables of different cultivars and product features encoded by the genetic variables under different growth conditions. Figure 3A is Cultivar 1, Figure 3B is Cultivar 2, and Figure 3C is Cultivar X.

MARKED UP VERSION:

Figures 3A, 3B, and 3C are [is-a]diagrams showing a database for storing genetic variables of different cultivars and product features encoded by the genetic variables under different growth conditions. Figure 3A is Cultivar 1, Figure 3B is Cultivar 2, and Figure 3C is Cultivar X.

2. Please replace lines 6-7, at page 11, with the following text:

CLEAN VERSION:

Figures 6A, 6B, and 6C are diagrams showing a database used for correlating measured indices from a sample with product processing data. Figure 6A is Product Processing Set 1, Figure 6B is Product Processing Set 2, and Figure 6C is Product Processing Set N.

MARKED UP VERSION:

Figures 6A, 6B, and 6C are [is-a]diagrams showing a database used for correlating measured indices from a sample with product processing data. Figure 6A is Product Processing Set 1, Figure 6B is Product Processing Set 2, and Figure 6C is Product Processing Set N.

3. Please replace the second paragraph at page 20, with the following text:

CLEAN VERSION:

Referring now to Figure 3, there is shown a database with a plurality of

records 250a, 251a...252x. Each record contains a set of genomic data (genetic variables) information fields 253a, 254a...or 255x. Each set of genomic data information fields is representative of a particular cultivar (Figure 3A cultivar 1, Figure 3B cultivar 2... or Figure 3C cultivar X). Each record also contains a particular set of growth conditions information fields 240a, 241a...or 242x under which the particular cultivar is to be grown. In this respect, each set of genomic information field representing the particular cultivar (e.g., 253a) corresponds to the particular set of growth conditions information fields (e.g., 240a). In addition, each set of genomic data information fields 253a, 254a...or 255x corresponds to a given set of product feature range fields 256a, 257a...or 258x. Records 250a, 251a...252x are constructed as discussed above using publicly available information. By using these records one practicing the invention can readily discern the product features that are expected of a given cultivar when grown under a given set of growth conditions prevailing in a particular geographic location.

MARKED UP VERSION:

Referring now to Figure 3, there is shown a database with a plurality of records 250a, 251a...252x. Each record contains a set of genomic data (genetic variables) information fields 253a, 254a...or 255x. Each set of genomic data information fields is representative of a particular cultivar (**Figure 3A** cultivar 1, **Figure 3B** cultivar 2... or **Figure 3C** cultivar X). Each record also contains a particular set of growth conditions information fields 240a, 241a...or 242x under which the particular cultivar is to be grown. In this respect, each set of genomic information field representing the particular cultivar (e.g., 253a) corresponds to the particular set of growth conditions information fields (e.g., 240a). In addition, each set of genomic data information fields 253a, 254a...or 255x corresponds to a given set of product feature range fields [~~354a, 355a...or 356x~~] **256a, 257a...or 258x**. Records 250a, 251a...252x are constructed as discussed above using publicly available information. By using these records one practicing the invention can readily discern the product features that are expected of a given cultivar when grown under a given set of growth conditions prevailing in a particular geographic location.

4. Please replace the second paragraph at page 23, with the following text:

CLEAN VERSION:

Referring again to Figure 3, there is shown a database with a plurality of records 250a, 251a, 252a for cultivar 1 (Figure 3A) 250b, 251b, 252b for cultivar 2 (Figure 3B) and 250x, 251x, 252x for cultivar x (Figure 3C). Each record contains a first set (240a, 240b, 240x) a second set (241a, 241b or 241x) and a third set (242a, 242b or 242x) of growth conditions information fields. Each set (e.g., 240a, 241a, or 242a) of growth conditions information fields represents a set of agronomic and environmental variables prevailing during a particular growth stage (seedling stage, flowering stage, fruiting stage etc.) of a given cultivar (e.g., cultivar 1). In addition, each set (240a, 241a, 242a, 240b, 241b, 242b, 240x, 241x or 242x) of growth conditions Information fields corresponds to a given set of product feature range fields (256a, 257a, 258a, 256b, 257b, 258b, 256x, 257x, or 258x, respectively, developed from the already available information. The relationship between a given pair of sets (e.g. 240a, 256a) is such that when raw product (e.g. tomato fruit) that has indices (e.g., the indices stored in step 190) falling within or matching the limits of product feature range set (e.g., 256a), then a determination is made that the selected cultivar 1 should be grown under the growth conditions specified in the corresponding growth conditions information field set (e.g., 240a) in order to be able to produce the products that meet the required quality standard.

MARKED UP VERSION:

Referring again to Figure 3, there is shown a database with a plurality of records 250a, 251a, 252a for cultivar 1 (Figure 3A) 250b, 251b, 252b for cultivar 2 (Figure 3B) and 250x, 251x, 252x for cultivar x (Figure 3C). Each record contains a first set (240a, 240b, 240x) a second set (241a, 241b or 241x) and a third set (242a, 242b or 242x) of growth conditions information fields. Each set (e.g., 240a, 241a, or 242a) of growth conditions information fields represents a set of agronomic and environmental variables prevailing during a particular growth stage (seedling stage, flowering stage, fruiting stage etc.) of a given cultivar (e.g., cultivar 1). In addition,

each set (240a, 241a, 242a, 240b, 241b, 242b, 240x, 241x or 242x) of growth conditions information fields corresponds to a given set of product feature range fields (256a, 257a, 258a, 256b, 257b, 258b, 256x, 257x, or 258x, respectively, developed from the already available information. The relationship between a given pair of sets (e.g. 240a, 256a) is such that when raw product (e.g. tomato fruit) that has indices (e.g., the indices stored in step 190) falling within or matching the limits of product feature range set (e.g., 256a), then a determination is made that the selected cultivar 1 should be grown under the growth conditions specified in the corresponding growth conditions information field set (e.g., 240a) in order to be able to produce the products that meet the required quality standard.

5. Please replace the last paragraph at page 28, with the following text:

CLEAN VERSION:

Referring now to Figure 6, there is shown a database with a plurality of records 350a (Figure 6A), 350b (Figure 6B)...350x (Figure 6C). Each record contains a first set 352 of product processing data information fields, and a second set 354 of product feature range fields 354. Each set (352a, 352b...352x) of product processing data information fields represents a set of processing parameters (e.g., specific mill time, specific heat time, specific heat temperature, amount of heat etc.) In addition, each set (352a, 352b... or 352x) of product processing data information fields corresponds to a given set of product feature range fields 354a, 354b... or 354x. For example, the amount of heat required to change the temperature of a material (e.g., tomato fruit) from T_1 to T_2 depends, among other things, on the mass of the material. Specific

MARKED UP VERSION:

Referring now to Figure 6, there is shown a database with a plurality of records 350a (Figure 6A), 350b (Figure 6B)...350x (Figure 6C). Each record contains a first set 352 of product processing data information fields, and a second set 354 of product feature range fields 354. Each set (352a, 352b...352x) of product processing data information fields represents a set of processing parameters (e.g., specific mill time, specific heat time, specific heat temperature, amount of heat etc.) In addition, each set (352a, 352b... or

352x) of product processing data information fields corresponds to a given set of product feature range fields 354a, 354b... or 354x. For example, the amount of heat required to change the temperature of a material (e.g., tomato fruit) from T_1 to T_2 depends, among other things, on the mass of the material. Specific